

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 – 18 (Canceled).

19. (Currently Amended) A recombinant α -N-acetylglucosaminidase or a fragment thereof having α -N-acetylglucosaminidase activity produced in a cell capable of N-glycosylating said α -N-acetylglucosamine, wherein said α -N-acetylglucosaminidase or fragment thereof hydrolyzes α -N-acetylglucosamine residues from the non-reducing terminus of heparan sulphate, and wherein the recombinant α -N-acetylglucosaminidase comprises the amino acid sequence as set forth in SEQ ID NO:2[[,]] or an amino acid sequence encoded by a polynucleotide capable of hybridizing to SEQ ID NO:1 or SEQ ID NO:3 under high stringency conditions wherein ~~the molecular weights of the~~ recombinant α -N-acetylglucosaminidase ~~are~~ has a molecular weight of about 89kDa and about 79kDa as determined by SDS PAGE.

20. (Previously Presented) The recombinant α -N-acetylglucosaminidase according to claim 19 in pure form relative to non α -N-acetylglucosaminidase material as determined by weight, activity, amino acid homology or similarity, or antibody reactivity ~~or other convenient means~~.

21. (Currently Amended) The recombinant α -N-acetylglucosaminidase according to claim 19 ~~when expressed in~~ wherein the cells capable of N-glycosylating said α -N-acetylglucosamine are mammalian, yeast or insect cells.

Claims 22 – 24 (Canceled).

25. (Currently Amended) The recombinant α -N-acetylglucosaminidase according to claim 24 ~~21~~ wherein the mammalian cells are CHO cells.

26. (Previously Presented) The recombinant α -N-acetylglucosaminidase according to claim 19 wherein said recombinant α -N-acetylglucosaminidase is in a glycosylated form.

27. (Previously Presented) The recombinant α -N-acetylglucosaminidase according to claim 26 wherein the molecular weight of the glycosylated form as determined using SDS/PAGE is at least approximately 79 kDa.

28. (Canceled).

29. (Previously Presented) The recombinant α -N-acetylglucosaminidase according to claim 19 comprising an amino acid sequence as set forth in SEQ ID NO:2.

30. (Previously Presented) The recombinant α -N-acetylglucosaminidase according to claim 19 when fused to another proteinaceous molecule.

31. (Previously Presented) The recombinant α -N-acetylglucosaminidase according to claim 30 wherein the other proteinaceous molecule is an enzyme, reporter molecule, purification moiety and/or a signal sequence.

Claims 32 - 59 (Canceled).

60. (Currently Amended) A pharmaceutical composition comprising a recombinant α -N-acetylglucosaminidase or a fragment thereof having α -N-acetylglucosaminidase activity and one or more pharmaceutically acceptable carriers and/or diluents wherein said α -N-acetylglucosaminidase or fragment thereof is produced in a cell capable of N-glycosylating said α -N-acetylglucosaminidase, wherein said α -N-acetylglucosaminidase or fragment thereof hydrolyzes α -N-acetylglucosamine residues from the non-reducing terminus of heparan sulphate, wherein the recombinant α -N-acetylglucosaminidase comprises at least one of an the amino acid sequence as set forth in SEQ ID NO:2 or an amino acid sequence encoded by a polynucleotide capable of hybridizing to SEQ ID NO:1 or SEQ ID NO:3 under high stringency conditions and wherein the molecular weights of the recombinant α -N-acetylglucosaminidase are has a molecular weight of about 89kDA and about 79kDa as determined by SDS PAGE.

61. (Previously Presented) The pharmaceutical composition according to claim 60 wherein the recombinant α -N-acetylglucosaminidase comprises an amino acid sequence as set forth in SEQ ID NO:2.

62. (Currently Amended) The pharmaceutical composition according to claim 60 wherein the cells capable of N-glycosylating said α -N-acetylglucosamine are mammalian, yeast or insect cells ~~recombinant α -N-acetylglucosaminidase is produced in a mammalian cell.~~

63. (Previously Presented) The pharmaceutical composition according to claim 62 wherein the mammalian cell is a CHO cell line which is capable of glycosylating the recombinant α -N-acetylglucosaminidase.

64. (Original) The pharmaceutical composition according to claim 60 wherein the α -N-acetylglucosaminidase is glycosylated.

Claims 65 – 110 (Canceled).